

CLAIMS

1. A method of operating a refrigerated oven to cook a food item therein, the refrigerated oven comprising a cooking chamber having a heating element for heating the cooking chamber, a refrigeration unit for cooling the cooking chamber, a temperature sensor for sensing the temperature of the cooking chamber, a data input device for inputting user-selected cooking cycle parameters, and a controller operably coupling the heating element, refrigeration unit, temperature sensor, and the data input device to selectively actuate the heating element and the refrigeration unit in response to the sensed temperature to implement the method as defined by the cooking cycle parameters, the method comprising the steps of:

10 A. cooling the cooking chamber to prevent spoilage of the food item in the cooking chamber by cycling the refrigeration unit for a first time period;

 B. heating the cooking chamber to cook the food item in the cooking chamber by cycling the heating element for a second time period; and

 C. delaying the initiation of step A until the temperature of the cooking chamber cavity is below a predetermined threshold temperature.

2. The method of claim 1 wherein the predetermined threshold temperature is about 170 °F.

3. The method of claim 1 and further comprising terminating the operation of the refrigerated oven if the initiation of Step A is delayed beyond a predetermined time.

4. The method of claim 1 wherein step A includes maintaining the temperature of the cooking chamber at a first predetermined temperature.

5. The method of claim 1 wherein step B includes maintaining the temperature of the cooking chamber at a second predetermined temperature.

6. The method of claim 5 wherein the second predetermined temperature is inputted into the controller by a user.

7. The method of claim 1 and further comprising determining the first time period based on at least one cooking cycle parameter inputted by a user.

8. The method of claim 7 wherein there are two cooking cycle parameters, an End Time corresponding to the time of day that step B is to be completed and a Bake Time corresponding to the length of time for cooking the food item, and the first time period is determined by subtracting the Bake Time from the End Time.

9. The method of claim 8 wherein the second time period is equal to the Bake Time.

10. The method of claim 1 and further comprising step:

D. after the completion of step B, heating the cooking chamber to maintain the food item at a temperature suitable for serving upon removal from the cooking chamber by cycling the heating element for a third time period.

11. The method of claim 10 wherein step D is automatically initiated after step B.

12. The method of claim 11 wherein step D is terminated upon the opening of the oven door.

13. The method of claim 10 wherein step D includes maintaining the temperature of the cooking chamber at a third predetermined temperature.

14. The method of claim 10 and further comprising the step of:

E. cooling the cooking chamber after step D to prevent the spoiling of the cooked food by cycling the refrigeration unit for a fourth time period.

15. The method of claim 14 wherein step E is automatically initiated after step D.

16. The method of claim 15 wherein step E is terminated upon the opening of the oven door.

17. The method of claim 1 wherein step A is terminated if the cooking chamber is not reduced to a second predetermined threshold temperature within a predetermined time period.

18. The method of claim 17 wherein the second predetermined threshold temperature is 170°F.

19. A method of operating a refrigerated oven to cook a food item therein, the refrigerated oven comprising a cooking chamber having a heating element for heating the cooking chamber, a refrigeration unit for cooling the cooking chamber, a temperature sensor for sensing the temperature of the cooking chamber, a data input device for inputting user-selected cooking cycle parameters, and a controller operably coupling the heating element, refrigeration unit, temperature sensor, and the data input device to selectively actuate the heating element and the refrigeration unit in response to the sensed temperature to implement the method as defined by the cooking cycle parameters, the method comprising the steps of:

A. cooling the cooking chamber to prevent spoilage of the food item in the cooking chamber by cycling the refrigeration unit for a first time period;

B. heating the cooking chamber to cook the food item in the cooking chamber by cycling the heating element for a second time period; and

C. terminating step A if the temperature of the cooking chamber is not lowered to a predetermined threshold temperature within a predetermined time period.

20. The method of claim 19 wherein the predetermined threshold temperature is 170°F.

21. The method of claim 19 and further comprising step:

D. after the completion of step B, heating the cooking chamber to maintain the food item at a temperature suitable for serving upon removal from the cooking chamber by cycling the heating element for a third time period.

22. The method of claim 21 wherein step D is automatically initiated after step B.
23. The method of claim 23 wherein step D is terminated upon the opening of the oven door.
24. The method of claim 21 and further comprising the step of:
- E. cooling the cooking chamber after step D to prevent the spoiling of the cooked food by cycling the refrigeration unit for a fourth time period.
25. The method of claim 24 wherein step E is automatically initiated after step D.
26. The method of claim 24 wherein step E is terminated upon the opening of the oven door.
27. A time-bake cooking cycle for a refrigerated oven used to cook a food item therein, the refrigerated oven comprising a cooking chamber selectively closeable by a door, a heating element for heating the cooking chamber, a refrigeration unit for cooling the cooking chamber, a temperature sensor for sensing the temperature of the cooking chamber, a data input device for inputting user-selected cooking cycle parameters, and a controller operably coupling the heating element, refrigeration unit, temperature sensor, and the data input device to selectively actuate the heating element and the refrigeration unit in response to the sensed temperature to implement the cooking cycle as defined by the cooking cycle parameters, the time-bake cooking cycle comprising:
- 10 a cool cycle wherein the temperature of the cooking chamber is maintained at a first predetermined temperature to prevent spoilage of the food item in the cooking chamber;
- 15 a bake cycle following the cool cycle wherein the temperature of the cooking chamber is maintained at a temperature to cook the food item in the cooking chamber; and
- a warm cycle automatically following the bake cycle wherein the temperature of the cooking chamber is maintained at a temperature suitable for serving

the food item upon removal from the cooking chamber and the warm cycle is terminated upon the opening of the oven door.

28. The time-bake cooking cycle according to claim 27 and further comprising a delay cycle wherein the initiation of the cool cycle is delayed as long as the temperature of the cooking chamber is above a predetermined threshold temperature.

29. The time-bake cooking cycle according to claim 28 wherein the time-bake cooking cycle is aborted once the duration of the delay cycle exceeds a predetermined time period.

30. The time-bake cooking cycle according to claim 27 and further comprising a second cool cycle automatically initiated after the warm cycle.

31. The time-bake cooking cycle according to claim 30 wherein the second cool cycle is terminated upon the opening of the oven door.

32. The time-bake cooking cycle according to claim 27 and further comprising a data input cycle prior to the cool cycle wherein user-defined operating parameters are stored in the controller.

33. The time-bake cooking cycle according to claim 32 wherein the user-defined operating parameters comprise an End Time representing the time of day that the cooking of the food is to be completed and a Bake Time representing the length of time to cook the food.

34. The time-bake cooking cycle according to claim 33 wherein the bake cycle is initiated at the time of day corresponding to the End Time minus the Bake Time.

35. The time-bake cooking cycle according to claim 27 wherein the cool cycle is terminated if the temperature of the cooking chamber does not fall below a predetermined threshold temperature.

36. The time-bake cooking cycle according to claim 35 wherein the cool cycle is terminated after the cooking chamber temperature is not lowered below the predetermined threshold temperature for a predetermined time.

37. The time-bake cooking cycle according to claim 27 wherein the warm cycle is terminated after a predetermined time period.

